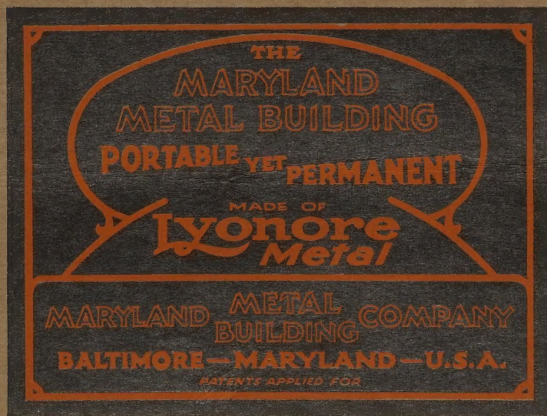


# Airport Buildings and their Construction








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OMMERCIAL aviation—that's the latest big stride of business! Lanes of the air humming with activity—beacons guiding planes East and West. California days closer to New York—quick deliveries—bigger business—a new era of prosperity—that's the empire built by a new race of pioneers who have chartered the skies!

Where lives the man who can predict the future of this new stride of commerce—draw boundaries for its growth—who can afford to let it pass him by? Already aggressive executives have realized the possibilities aviation holds out to their businesses—are making preparations to capitalize upon them. Many are even picturing advantages and comforts of flying for pleasure.

So quickly has aviation outgrown the hopes of its most enthusiastic sponsors, that the cry now is for better airport facilities—better hangars, fields, shops and living quarters—to keep pace with the industry. The Maryland Metal Building Company long ago saw the realm that aviation was to conquer. Believers in aviation, their engineers have kept pace with the progressive fliers and are today, as ever, ready to meet the growing demands of a new industry—ready to offer the finest, most practical, most appropriate equipment available to all who would identify themselves with this new era of transportation.

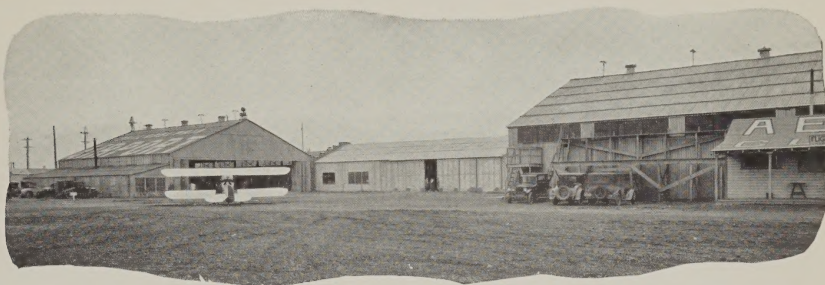


THE layout of an airport no longer consists of the haphazard selection of a field and erection of a shelter. It can and should be scientifically done by someone trained in airport design—someone to whom experience has pointed out the outstanding advantages of various airports the country over.

The establishment of an airport should come only after a careful survey of the locality it is to serve—its relation to existing or possible air routes—the volume of traffic it may expect—the finances available for its completion and the income it should derive. Nearness to the business center—accessibility to the public—transportation to and from the airport—height of neighboring buildings—city zoning and planning—all have to be considered.

The Maryland Metal Building Company maintains a separate and distinct department to work with its prospective customers in preparing suggested airport layouts, building designs and equipment. The constructive service this department offers—service based upon a considerable amount of actual experience in airport design and layout—is entirely free—consultation is without obligation of any kind.

In the back of this pamphlet, is a "Request for Estimate." If you're interested in learning costs for modern, up-to-date, government approved airport equipment, just jot down the information requested and send it in to this office.

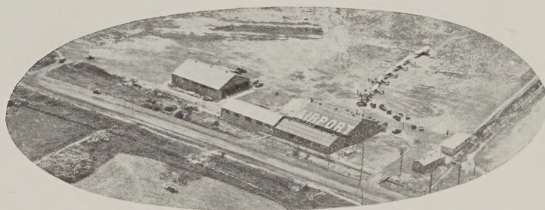


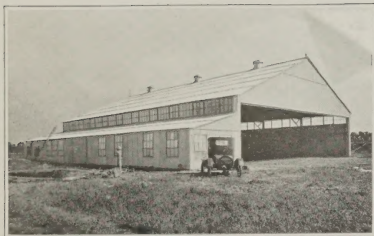
## Maryland Metal Hangars and Buildings Equip America's Third Largest City's Airport

**T**HE Philadelphia Airport—aviation center for America's third largest city has standardized completely upon Maryland Metal Airport Buildings.

Sturdy, dependable, fire-proof—this attractive equipment will, year after year, provide safety for the planes—comfort for pilots and visitors. The entire layout, ordered right out of stock, has saved valuable months ordinarily devoted to the drafting of plans and specifications and to actual construction—has saved considerable money because the buildings were all of standard design.

That's the quickest, most satisfactory, and by far, the most economical way to buy Maryland Metal Airport Buildings.

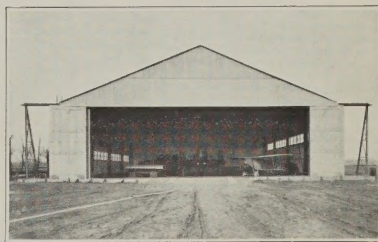




Airplane manufacturers have been quick to sense the practicability of Maryland Metal Buildings. Where time is so great a factor as it is in this amazing new industry, there is an urgent demand for permanent, trustworthy buildings to rapidly house production expansion. Maryland Metal Buildings save harassed airplane builders months when days count—they're in perfect step with the needs of speedily growing manufacturers—up in a hurry—there to stay.

The country is dotted with airports equipped with these neat, clean, attractive and practical hangars and supplemental airport buildings. They're drawing visitors to these airports because of their up-to-the-minute appearance; they look their part—strong, permanent, fire-proof, safe.

The illustration shows a Maryland Metal Hangar ordered from stock and erected on the experimental airport of the Keystone Aircraft Corporation at Bristol, Pennsylvania, makers of the famous "Pirates"—U. S. Government planes. A new addition has been erected as part of this hangar to house one of their new ships—a ship with a wing spread of 110 feet.







## In or Out of Either Doorway

**W**IDE, spacious doorways—motor or hand operated—handy to mechanic and pilot alike—this is a point of advantage which Maryland Metal Hangars provide. Incoming ships quickly housed—planes readily maneuvered for repair work or overhauling—no confusion—no breakage—planes may be easily and quickly run in or out of either end of the hangar.

The hangar illustrated is taking care of repairs, conditioning and general upkeep on ships. Every plane in the hangar is accessible with an absolute minimum of jostling, special placing and strain on gear.

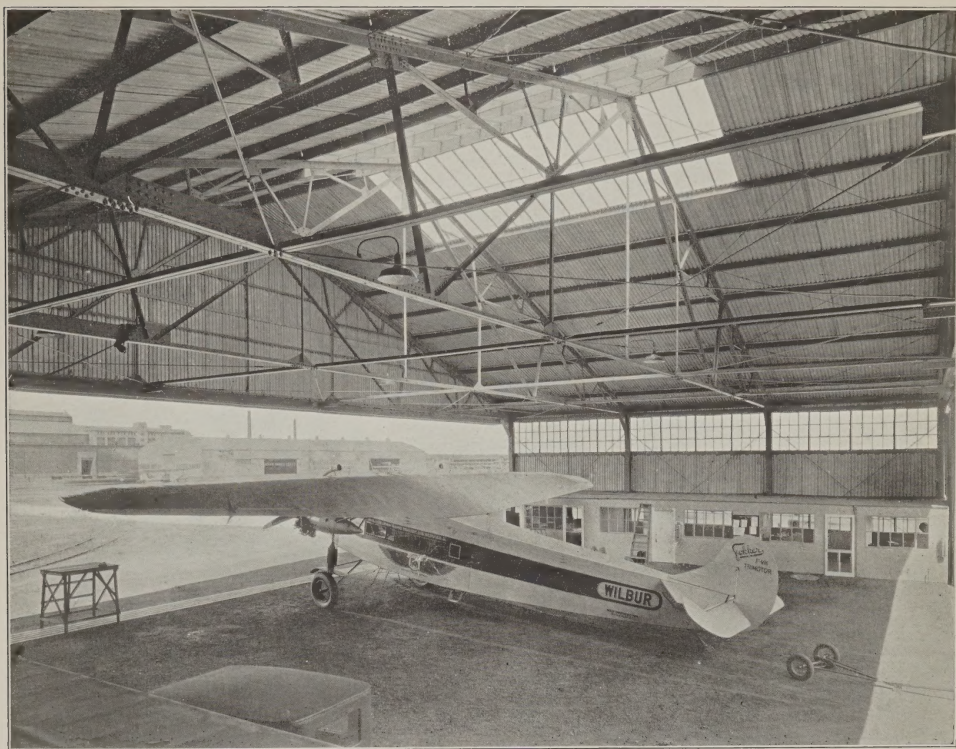


## Accordion Folding or Sliding Doors— Whatever You Prefer

**T**HAT'S the way it is with most of the optional equipment that goes into Maryland Metal Airport Buildings. Every device offered by this company, not of its own manufacture, is rigidly tested and examined before it is offered to our prospective customers. You may be very sure of the quality, the workmanship and the satisfactory performance of every piece of optional equipment listed among the specifications for standard airport buildings.

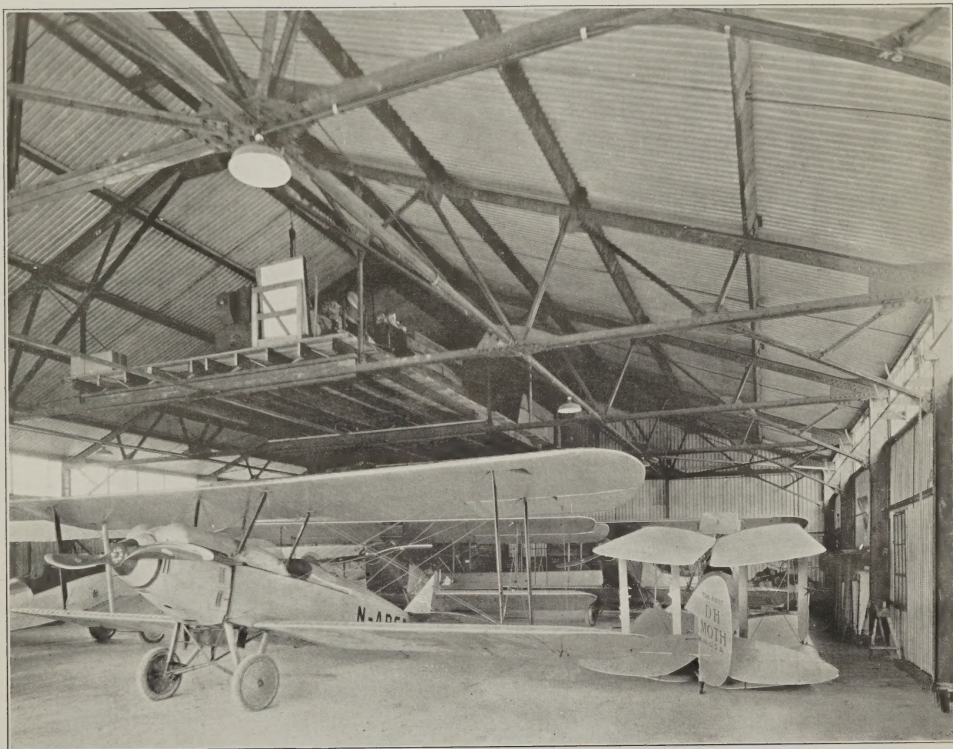
We have tested thoroughly, both the accordion folding and the sliding type of doors; they are equally satisfactory in performance. It is a matter of personal preference; both types are offered—each type may be motor or hand operated—trustworthy operating performance is guaranteed.





## Ready for Flight At a Moment's Notice

**I**N airports where there is likelihood of instant demands for planes—where ships must be kept in readiness to take off at a moment's notice—the hangar openings front and rear, are practically indispensable. Planes may be housed pointing outward at all times—ready to be wheeled directly on to the field, tuned up, and away—with an absolute minimum of handling, maneuvering and jostling in getting them into the clear. Doorways that open the full width of the building not only provide ready accessibility to every plane in the hangar, but they admit a volume of light so necessary to mechanics and repairmen.



## Maximum Freedom in Handling Ships

**C**LEAR spans—large, unobstructed floor space—wide openings front and rear—these are the qualities to look for in a hangar. Machine shop close at hand—dope room conveniently located under one of the leantos nearby—comfortable mechanics' quarters right in the building itself—everything compactly arranged and conveniently placed for instant use. No jostling of ships in moving them into different positions, no jamming, no breakage from rough, hurried handling—Maryland Metal Hangars are designed by airport engineers who have been constructing airport buildings for years, and who know what to avoid in designing the buildings necessary for efficient, smooth-running management of the modern airport.





## Airport Office Buildings

**I**N many of the larger airports, separate office buildings are provided; in several instances these have become necessary in order to provide additional space in the hangar building itself, for machine shops or chart rooms for pilots.

For this purpose there is a Maryland Metal Office Building that may be ordered right out of stock. The building is 24' x 32' x 12' and is especially designed to provide adequate light and ventilation. Comfortable in Summer and Winter—lined with panelled wall board—damp proof and fire resistant—neat in appearance and easy to maintain. Double insulated flooring assures comfort despite weather conditions.

These buildings are practically ready to ship—they can be up and occupied in a surprisingly short time—clean, comfortable quarters for the office force.



## Standard Buildings for Special Purposes

**T**HE flexibility of construction—the interchangeability of all standard parts makes Maryland Metal Buildings of standard design readily adaptable to any number of special uses. For instance here is one of these sturdy buildings—covering, framework and design standardized—which fulfills all of the requirements of a dope house. To date, there has not been a design submitted which provides greater safety to its contents—greater accessibility to the stores within—than this standard structure.

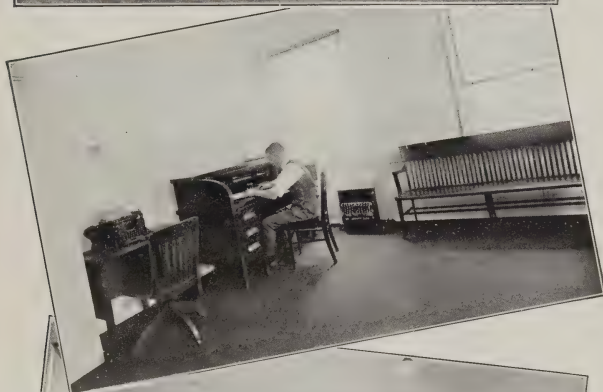
These little buildings can be supplied almost within a moment's notice in a wide range of sizes. Drawings and specifications are all made, covering and structural steel is in stock—all the data we require is the size you would like to have. Your building can be shipped immediately—can be in use in an absolutely minimum length of time.



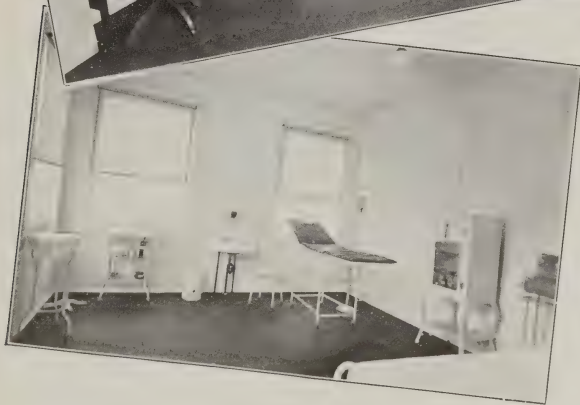
## Airport First Aid Stations



FOR AIRPORTS WHERE THE FIRST AID STATION IS NOT HOUSED IN THE MAIN HANGAR, THIS VERY NECESSARY AIRPORT DEPARTMENT MAY BE READILY TAKEN CARE OF IN A MARYLAND METAL BUILDING MADE STANDARD FOR THIS VERY PURPOSE. SIZES, DETAILS OF CONSTRUCTION AND PLANS SENT UPON REQUEST.



INTERIOR VIEW OF ABOVE BUILDING CONSULTATION ROOM



INTERIOR VIEW OF FIRST AID DISPENSARY, SHOWING OPERATING ROOM

## Airport Garages



**Q**UITE naturally, the fire hazard is one of the greatest dangers the modern airport has to face. The necessity of storing large quantities of gasoline and highly combustible materials for coating wings and fuselage, coupled with the almost constant use of automobile trucks around the airport, and pleasure cars of visitors and pilots, makes fire preventative measures very essential.

Maryland Metal Garages can be supplied from stock in practically any size. Commodious, well-lighted and perfectly ventilated they are an economical safety measure for the modern, well-equipped airport.





## Hose Reel Houses

**H**ERE is another standard Maryland Metal Building designed for housing fire-fighting apparatus. Neat in appearance, large enough for easy handling of equipment when speed is vital—wide doorways, and staunch construction all combine to make these buildings serve the purpose for which they are designed effectively and economically.



## Gasoline Stations

**M**ANY of the country's largest airports have their own filling stations to serve both planes and motor cars right from their own pumps. A definite performance record can easily be kept by this system of gasoline consumption by any engine at the airport.

Designs for this class of building are so varied that we have not attempted to standardize on any design. Most of the airports have adopted the type of building shown here for the sake of economy and actual usefulness. Because of the flexibility of Maryland Metal Buildings, however, virtually any design or layout for this class of building may be readily erected from stock parts and materials.

## General Specifications

**Standard Stock Sizes:** 4' Up to 60' wide, inclusive (clear span). Length in any multiple of 2'.

**Walls:** 8', 10' or 12' high. Interlocking units 2' wide.

**Doors:** Are the Kalamein type and are equipped with all hardware, galvanized hinges having bronze hinge pins to prevent corrosion.

**Sash:** Standard bar steel type, equipped with ventilators and hardware complete. Glass is either  $\frac{1}{8}$ " plain ribbed or  $\frac{1}{4}$ " rough wire. We do not furnish sash glazed, but our quotations include the furnishing of glass, clips, and putty for glazing.

**Sills:** All sills of  $1\frac{1}{2}$ " x  $1\frac{1}{2}$ " x  $\frac{1}{8}$ " angle, galvanized, anchored to floor of wood or concrete; with bent anchors for concrete, and lag screws for wood. Anchors furnished by us. These anchors are spaced on 5-foot centers.

**Eaves:** Eave angles of 2" x  $1\frac{1}{2}$ " x  $\frac{1}{8}$ " angle iron, galvanized; to which is attached the eave channel of No. 20 gauge galvanized Lyonore Metal. After being placed in position this angle receives the wall sheets, both of which are attached to the eave angles with sherardized bolts. This eave channel is designed to form a pocket for the roof sheets, as well as to present a neatly finished cornice.

**Roof:** This is constructed of units 2' wide and the necessary length, according to the width of the building. Made of No. 24 gauge galvanized Lyonore Metal, each unit interlocked to the other in the same manner as the wall sheets.

**End Roof Sheets:** These are practically the same as the roof units, excepting that they are formed to receive the gable and are made to complete the cornice effect. They are constructed of No. 24 gauge galvanized Lyonore Metal.

**Ridge And Cap:** These members are of No. 24 gauge galvanized Lyonore Metal. The cap is attached after the roof panels are in place; is telescopic in design, and bolting is entirely eliminated, thus insuring weather-tight construction.

**Gables:** Same construction as wall and roof units.

**Cross Angles And Tie Rod:** All buildings of the Garage and Shelter House Types have  $1\frac{1}{2}$ " x  $1\frac{1}{2}$ " x  $\frac{1}{8}$ " galvanized cross angles, which act as separators or ties, and have  $\frac{1}{2}$ " diameter rods connecting them to the ridge to insure safety against wind pressure when the doors are open.

**Structural Steel:** All necessary structural steel work is supplied fabricated, with a minimum number of field connections. No cutting necessary on the ground. All steel work given a shop coat of paint before shipment.

**Equipment:** Doors, windows, ventilators and skylights as required. See Equipment on following page.

# Equipment

**Kalamein Door:** The Kalamein is a patented fireproof door and can be had in a variety of standard sizes. All necessary galvanized hardware is included. Hinge pins are bronze to prevent rust. Standard stock size with plain or glass panel.

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Single Hinged Doors, 2' 6" x 6' 6" | Double Hinged Doors, 8' x 7' 9"   |
| Single Hinged Doors, 3' x 7' 0"    | Double Hinged Doors, 10' x 9' 9"  |
| Single Hinged Doors, 4' x 6' 6"    | Double Hinged Doors, 12' x 11' 9" |

NOTE:—Sliding doors can be furnished in same sizes as Hinged doors.

**Sash:** All sash is of the bar steel type and, like the Kalamein doors, entirely fireproof.

| Size                  |                         | No. of Lights |     | Size   |  | No. of Lights |                        |
|-----------------------|-------------------------|---------------|-----|--|--|---------------|------------------------|
| 2' 6"                 | x 3' 6"                 | 2             | x 2 | Projected Sash                                 |  |               |                        |
| 3' 8"                 | x 3' 5 $\frac{3}{8}$ "  | 3             | x 3 | 4' 10 $\frac{3}{8}$ " x 8' 6 $\frac{3}{4}$ "   |  | 4             | x 5                    |
| 3' 8"                 | x 5' 2"                 | 3             | x 3 | 4' 10 $\frac{3}{8}$ " x 11' 11 $\frac{1}{2}$ " |  | 4             | x 7                    |
| 3' 8"                 | x 6' 10 $\frac{3}{8}$ " | 3             | x 4 | 4' 10 $\frac{3}{8}$ " x 8' 6 $\frac{3}{4}$ "   |  | 4             | x 5                    |
| 3' 8"                 | x 8' 6 $\frac{3}{4}$ "  | 3             | x 5 | Center ventilator                              |  | 3' 8"         | x 1' 9 $\frac{1}{4}$ " |
| 4' 10 $\frac{3}{8}$ " | x 6' 10 $\frac{3}{8}$ " | 4             | x 4 | "  |  | 2' 4"         | x 6' 2 $\frac{3}{4}$ " |
|                       |                         |               |     |  |  |               | Special                |

Sash can be furnished either single or continuous.

**Skylights:** The standard size of skylight is 2' x 4'. They are fire and weather proof and can be placed in almost any position of roof as they are required.

**Ventilators:** Furnished in the following standard stock sizes: 12"-18"-24"-30"-36" Diameters. The base of ventilator is made square to fit standard 2' roof panel.

**Chimneys:** Chimneys can be supplied to be located at any position in the roof. The standard size has a diameter of 8".

**Glazing:** All sash and skylights are equipped with either  $\frac{1}{8}$ " ribbed or rough  $\frac{1}{4}$ " wire glass. We furnish all necessary clips and putty for glazing but no glazing labor.



The mark shown above is placed on the door of all Maryland Metal Buildings. Look for it. It identifies structures *Built for Permanence*.

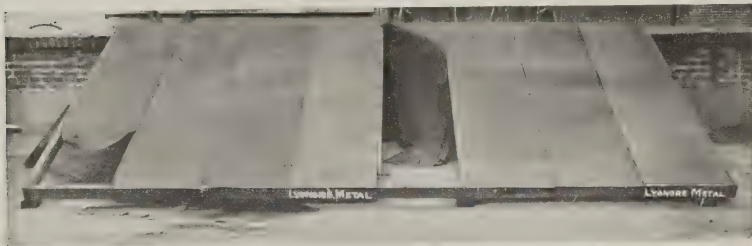


# **Lyonore Metal** *an alloy*



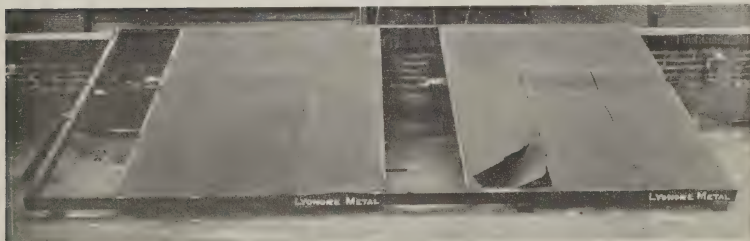
THROUGHOUT the foregoing pages we have made reference to Lyonore Metal, but it is quite possible that you are not entirely familiar with the merits of this enduring and remarkable alloy. To prove to you the wearing qualities of this product we are reproducing herewith illustrations of a test which show conclusively the superior rust-resisting qualities of Lyonore Metal over the so-called "Irons." Only No. 26 gauge black sheets were used. They had received no protective coating whatever.

In the test were two sheets of steel, two of so-called iron and two of Lyonore Metal. All were exposed to the elements and the disintegrating forces of smoke and fume-laden atmosphere that prevailed in the manufacturing and shipping district where the test was conducted.



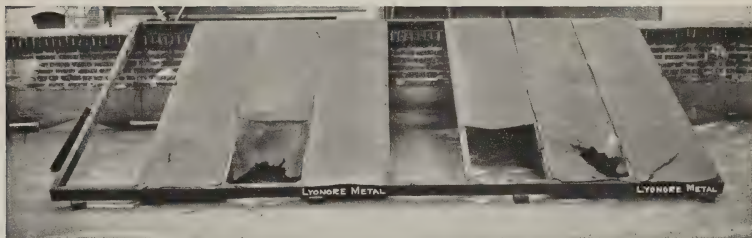
## END OF FIRST YEAR

Within one year the steel had corroded to such an extent that it became detached from the frame. The other sheets showed little effects from the first year's exposure.



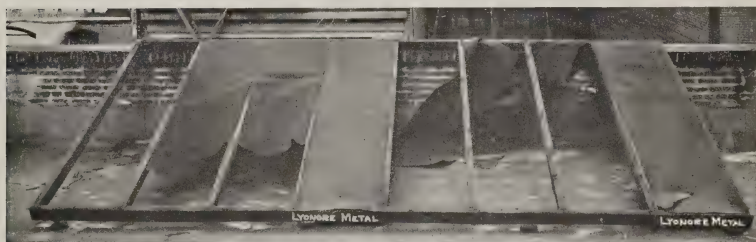
## END OF SECOND YEAR

Shortly after the second year of the test the steel had entirely disappeared. The so-called "Irons" were giving away.



#### END OF THIRD YEAR

Having started its work, the elements continued to corrode the so-called "Iron" sheets. During the month previous to taking this photograph, a severe March wind storm tore the Lyonore Metal sheet at the right from the frame, causing it to crack in one of the creases.



#### END OF FOURTH YEAR

After four years' exposure to every element of the atmosphere, the *Lyonore Metal* sheets were still in excellent condition, whereas the steel did not last a year, and the so-called "irons" lasted but  $2\frac{1}{2}$  years, thus proving clearly the superiority of *Lyonore Metal*. After the expiration of the test all the sheets were carefully removed and placed in a specially built case in our office, where they can be seen at any time.

In the construction of Maryland Metal Buildings, No. 24-gauge galvanized Lyonore Metal units are used.

## Method of Ordering



WHEN you find that you need a building for any one of the uses mentioned in the foregoing pages, or for purposes that may be similar, communicate with us. Please understand that there is no obligation incurred in asking the advice of our engineers, and it is quite possible that they may be able to solve your problem at a cost much less than you had anticipated. And when you consider the long life of the Maryland Metal Building and its practicability, you will find it is the best type of construction for your purpose, after all.

It is merely necessary to fill in the "Request for Estimate" blank on the following page as far as possible, with the information at your disposal and mail to us.



# Request for Estimate

MARYLAND METAL BUILDING CO.

Race and McComas Sts.

Baltimore, Md.

Gentlemen:—

Kindly quote on an Airport Building as per the following specifications:

Purpose for which Building is to be used.....

Location.....

Width.....Length.....Height to Eave.....

No. Windows.....Size.....Kind.....No. Ridge Vents.....Size.....

No. Doors.....Size.....Kind.....No. Chimney Tops.....Size.....

No. Skylights.....Size.....

Partitions to Eave?.....Partitions to Ridge?.....

No. Doors in Partitions.....Size.....No. Windows in Partitions.....Size.....

Concrete Walls.....Wood Sills.....

Clear or Wired Window Glass.....

Quote Erected.....Quote Not Erected.....

Remarks:.....

.....

.....

.....

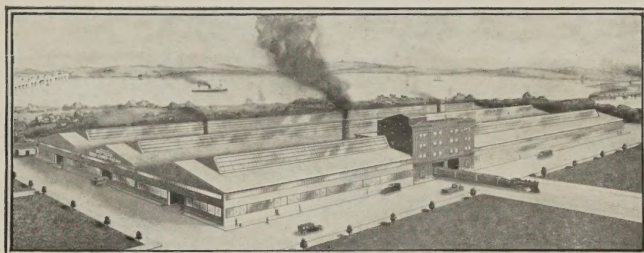
*Very truly yours,*

NAME.....

ADDRESS.....

Date.....

# BUILT FOR PERMANENCE



PLANT OF MARYLAND METAL BUILDING COMPANY - BALTIMORE  
THE LARGEST SECTIONAL METAL BUILDING IN THE WORLD  
WHERE MARYLAND METAL BUILDINGS ARE DESIGNED AND MANUFACTURED

## A Partial List of Industrial Concerns Using Maryland Metal Buildings

|  |                     |   |                     |
|--|---------------------|---|---------------------|
| AMERICAN OIL COMPANY.....                        | Baltimore, Md.      | SANITARY REDUCTION CO.....              | Bodkin Point, Md.   |
| BARTLETT-HAYWARD CO., INC.....                   | Baltimore, Md.      | STATE ROADS COMMISSION OF WEST VIRGINIA | Charleston, W. Va.  |
| BARRETT-HAENTJENS & CO.....                      | Hazleton, Pa.       | THE WM. SCHLUDERBERG-T. J. KURDLE CO.   | Baltimore, Md.      |
| BALTIMORE TUBE CO., INC.....                     | Baltimore, Md.      | TURNER FOUNDRY CO.....                  | Statesville, N. C.  |
| STANDARD GAS EQUIPMENT CORP.....                 | Baltimore, Md.      | TEXAS CONSTRUCTION CO.....              | Eastland, Tex.      |
| CAROLINA COTTON & WOOLEN MILLS CO., Spray, N. C. |                     | U. S. HOFFMAN MACHINERY CO.....         | Syracuse, N. Y.     |
| OELLA MILLS CO.....                              | Ellicott City, Md.  | A. WEISKITTEL & SON CO.....             | Baltimore, Md.      |
| ELECTRICAL COMMISSION.....                       | Baltimore, Md.      | WESTERN MARYLAND R. R. CO.....          | Baltimore, Md.      |
| THE FLEISCHMANN CO.....                          | Baltimore, Md.      | WOODLAWN CEMETERY CO.....               | Woodlawn, Md.       |
| PHOENIX UTILITY CO.....                          | New York            | STANDARD OIL CO. OF N. J.....           | Baltimore District  |
| GIBSON-HOWELL CO.....                            | Jersey City, N. J.  | STANDARD OIL CO. OF N. J.....           | New Jersey District |
| GULF REFINING CO.....                            | Philadelphia, Pa.   | J. H. MULHOLLAND CO.....                | Milford, Del.       |
| GRACE BROS. & CO.....                            | Honolulu, Hawaii    | SUSQUEHANNA COLLIERIES CO.....          | Williamstown, Pa.   |
| THE GEORGIA MARBLE CO.....                       | Tate, Ga.           | U. S. ENGINEERS CORPS.....              | Charleston, S. C.   |
| M. A. HANNA CO.....                              | Wilkes-Barre, Pa.   | FOAMITE-CHILDS CORP.....                | Utica, N. Y.        |
| HERCULES POWDER CO.....                          | Kenvil, N. J.       | THE TEXAS CO.....                       | New York            |
| THE HUMPHREY'S RAILWAY, INC.....                 | Weems, Va.          | PA. STATE HIGHWAY DEPARTMENT.....       | Harrisburg, Pa.     |
| JESSUP & MOORE PAPER CO.....                     | Elkton, Md.         | CENTRAL PENNSYLVANIA QUARRY.....        | Hazleton, Pa.       |
| LYON, CONKLIN & CO., INC.....                    | Baltimore, Md.      | ATLANTIC REFINING CO.....               | Philadelphia, Pa.   |
| P. R. MALLORY & CO., INC.....                    | Port Chester, N. Y. | MECHLENBURG IRON WORKS.....             | Charlotte, N. C.    |
| NEW MARKET MOTOR CO.....                         | New Market, Va.     | N. E. MINING & EXCHANGE CO.....         | Chicago, Ill.       |
| MOHEGAN TUBE CO.....                             | Brooklyn, N. Y.     | U. G. I. CONTRACTING CO.....            | Philadelphia, Pa.   |
| MARYLAND CULVERT & METAL CO.....                 | Baltimore, Md.      | PHOENIX UTILITY CO.....                 | New York            |
| MARYLAND STATE ROADS COMMISSION.....             | Baltimore, Md.      | MOUNTAIN ICE CO.....                    | Hoboken, N. J.      |
| THE RAILWAY TERMINAL WHOLESALE CO.,              | Washington, D. C.   | PHILADELPHIA QUARTZ CO.....             | Philadelphia, Pa.   |
| SOUTHERN WOOD PRESERVING CO.....                 | Atlanta, Ga.        | SOAPSTONE PRODUCTS CO.....              | Grassland, Pa.      |
| BOGALUSA PAPER CO.....                           | Bogalusa, La.       | PURE ASPHALT PRODUCTS CO.....           | New Market, N. J.   |
| SHAMBOW SHUTTLE CO.....                          | Greenville, S. C.   |   |                     |

## Airport Equipment Division of

**MARYLAND METAL BUILDING COMPANY**

BALTIMORE

MARYLAND





